

Title (en)

IMPROVED INVERSE TONE MAPPING METHOD AND CORRESPONDING DEVICE

Title (de)

VERBESSERTES INVERSES DYNAMIKKOMPRESSIÖNSVERFAHREN UND ZUGEHÖRIGE VORRICHTUNG

Title (fr)

PROCÉDÉ AMÉLIORÉ DE MAPPAGE INVERSE DE TONALITÉ ET DISPOSITIF CORRESPONDANT

Publication

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Application

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Abstract (en)

[origin: EP3503019A1] The present invention relates generally to the field of high dynamic range (HDR) imaging and addresses the way of expanding the dynamic range of low dynamic range images. The invention concerns a method comprising the steps of:- obtaining a predetermined expansion exponent map ($E(p)$) for said image (I);- determining, for each pixel (p) of the image (I), an expanded luminance value ($Y(p)$) by performing an exponentiation with an expansion exponent value determined from said predetermined expansion exponent map ($E(p)$) on a luminance value ($Y(p)$) of said pixel (p). According to the invention, the method further comprises the steps of- calculating, for said pixel (p) of the image (I), an expansion correcting value ((Δ)) by using a modulating function ((Δ)) that takes as input a value representative of the luminance of said pixel (p) and is an increasing function whose increase is higher for higher input values;- subtracting said expansion correcting value ((Δ)) from the expansion exponent value () of the predetermined expansion exponent map ($E(p)$).

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